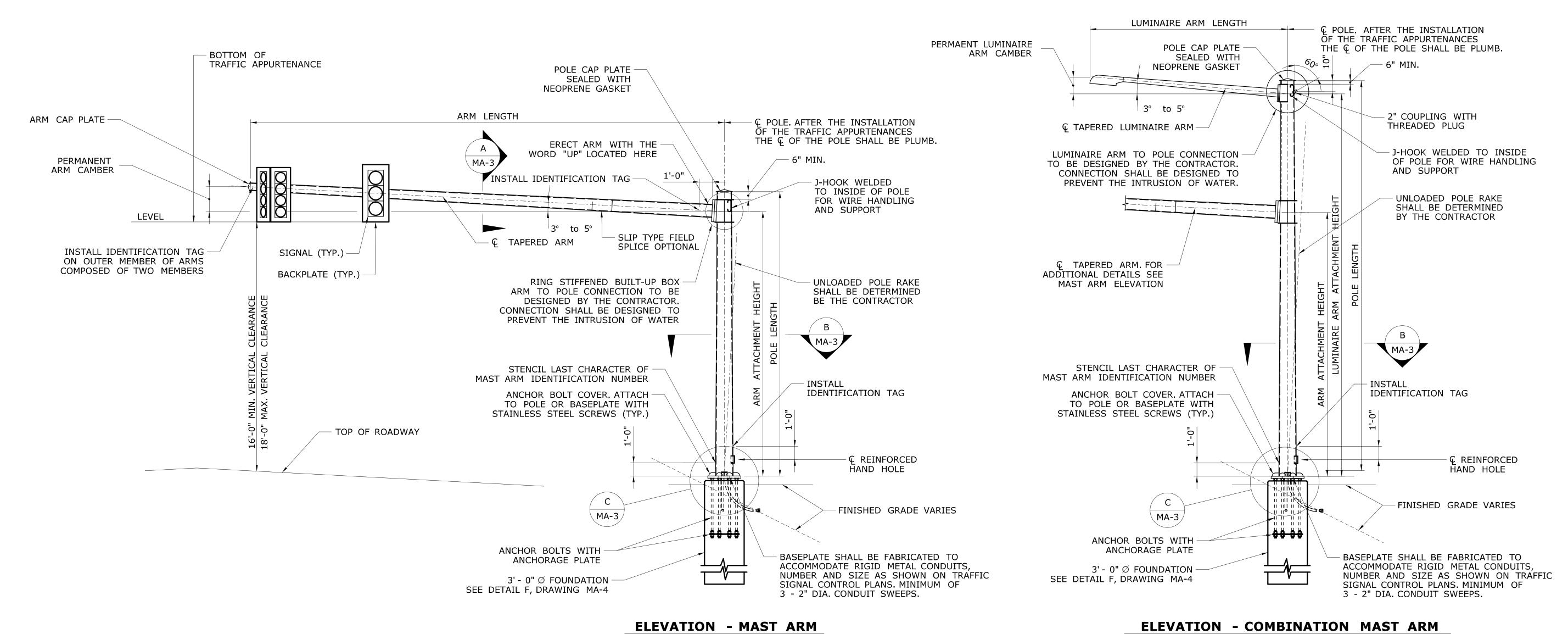
XX - STRUCTURES - MAST ARMS INDEX OF DRAWINGS

DRAWING NUMBER	DRAWING TITLE
MA-1	INDEX OF DRAWINGS
MA-2	STEEL MAST ARM ASSEMBLY ELEVATION
MA-3	STEEL MAST ARM ASSEMBLY DETAILS
MA-4	STEEL MAST ARM ASSEMBLY FOUNDATION DETAILS

THE DESIGN APPEARS TO CONFORM TO APPLICABLE CRITERIA. APPROVAL IS NOT TO BE CONSTRUED TO MEAN THAT ALL ASPECTS OF THE DESIGN HAVE BEEN PERSONALLY CHECKED BY THE UNDERSIGNED.

TRANSPORTATION PRINCIPAL ENGINEER

	DESIGNER/DRAFTER:		SIGNATURE/	PROJECT TITLE:	TOWN:	PROJECT NO.
THE INFORMATION, INCLUDING ESTIMATED	-	CONNECTICION OF THE PROPERTY O	BLOCK:		-	_
QUANTITIES OF WORK, SHOWN ON THESE SHEETS I SHEETS I STATE AND IS INVESTIGATIONS BY THE STATE AND IS	CHECKED BY:	STATE OF CONNECTICUT	OFFICE OF ENGINEERING	_	-	DRAWING NO.
IN NO WAY WARRANTED TO INDICATE		TRANSPORT TRANSPORT		_	DRAWING TITLE:	MA-1
THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.		DEPARTMENT OF TRANSPORTATION	APPROVED BY:	-	INDEX OF	SHEET NO.
	SCALE AS NOTED				DRAWINGS	
PEV DATE REVISION DESCRIPTION SHEET NO Plotted Date: 3/1/2021	7	Filename: \XXXXXXXX SB IndexOfDrawings SMA1 2021-2-23 dgn	1		PRAVINGS	



SCALE: $\frac{1}{4}$ " = 1'-0"

SCALE: $\frac{1}{4}$ " = 1'-0"

MAST ARM ASSEMBLY NOTES

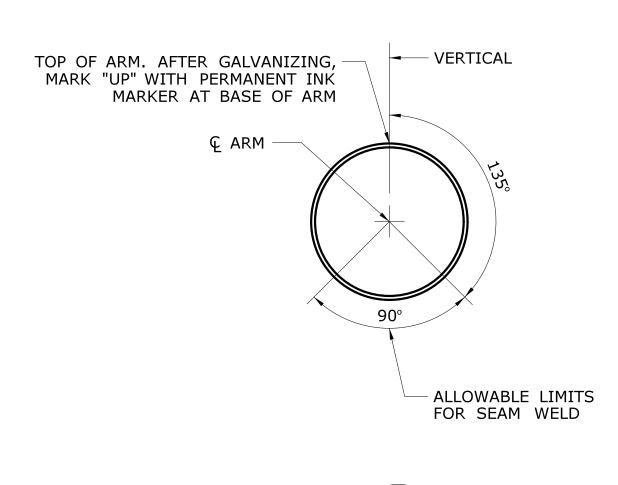
THE MAST ARM ASSEMBLY, INCLUDING THE ANCHORAGE TO THE FOUNDATION, SHALL BE DESIGNED, FABRICATED AND INSTALLED BY THE CONTRACTOR, OF THE SPAN SPECIFIED, IN ACCORDANCE WITH THE SPECIAL PROVISION "XX STEEL MAST ARM ASSEMBLY" OR "XX STEEL COMBINATION MAST ARM ASSEMBLY".

THE MAST ARM ASSEMBLY, INCLUDING THE ARM SPAN, ARM ORIENTATION, AND THE LOCATIONS OF THE TRAFFIC APPURTANENCES SUPPORTED BY THE STRUCTURE ARE SHOWN ON THE TRAFFIC CONTROL SIGNAL PLAN. PRIOR TO DESIGN OF EACH MAST ARM ASSEMBLY, THE CONTRACTOR SHALL PREPARE A LAYOUT DRAWING BASED ON A FIELD SURVEY AND THE CONTRACT DOCUMENTS TO VERIFY THE MAST ARM ASSEMBLY WHEN INSTALLED WILL MEET THE GEOMETRIC AND CLEARANCE REQUIREMENTS IN THE CONTRACT DOCUMENTS. IF THE REQUIREMENTS CANNOT BE MET, THE CONTRACTOR SHALL NOTIFY THE ENGINEER.

THE MAST ARM ASSEMBLIES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, INCLUDING THE LATEST INTERIM SPECIFICATIONS, AS AMENDED BY THE AS SPECIAL PROVISION "XX STEEL MAST ARM ASSEMBLY" OR "XX STEEL COMBINATION MAST ARM ASSEMBLY".

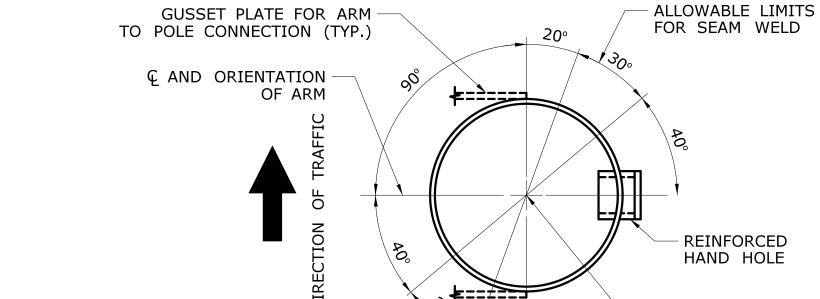
THE MAST ARM ASSEMBLIES SHALL BE DESIGNED TO SUPPORT TRAFFIC APPURTENANCES WITH PROPERTIES NO LESS THAN THOSE SHOWN ON THE TRAFFIC PLANS.

			DESIGNER/DRAFTER:	a sings h	SIGNATURE/	PROJECT TITLE:	TOWN:	PROJECT NO.
		THE INFORMATION, INCLUDING ESTIMATED QUANTITIES OF WORK, SHOWN ON THESE SHEETS IS BASED ON LIMITED INVESTIGATIONS BY THE STATE AND IS	- CHECKED BY: -	STATE OF CONNECTICUT	OFFICE OF ENGINEERING		_	DRAWING NO.
		IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.	SCALE AS NOTED	DEPARTMENT OF TRANSPORTATION	APPROVED BY:	<u> </u>	STEEL MAST ARM ASSEMBLY ELEVATION	MA-2 SHEET NO.
REV. DATE R	EVISION DESCRIPTION SHEET NO.	Plotted Date: 3/1/2021		Filename:\XXXXXXXX_SB_MastArm_SMA2_Elev_2-23-21.dgn	1		ASSEMBLI LLLVATION	



SECTION

SCALE: $1\frac{1}{2}$ " = 1'-0" \backslash **MA-2**



GUSSET PLATE FOR ARM

TO POLE CONNECTION (TYP.)

ALLOWABLE LIMITS FOR SEAM WELD

ALLOWABLE LIMITS

FOR SEAM WELD

© AND ORIENTATION OF ARM

POLE WITH 2 SEAM WELD **SECTION** SCALE: $1\frac{1}{2}$ " = 1'-0" \ **MA-2**/

POLE WITH 1 SEAM WELD

€ POLE

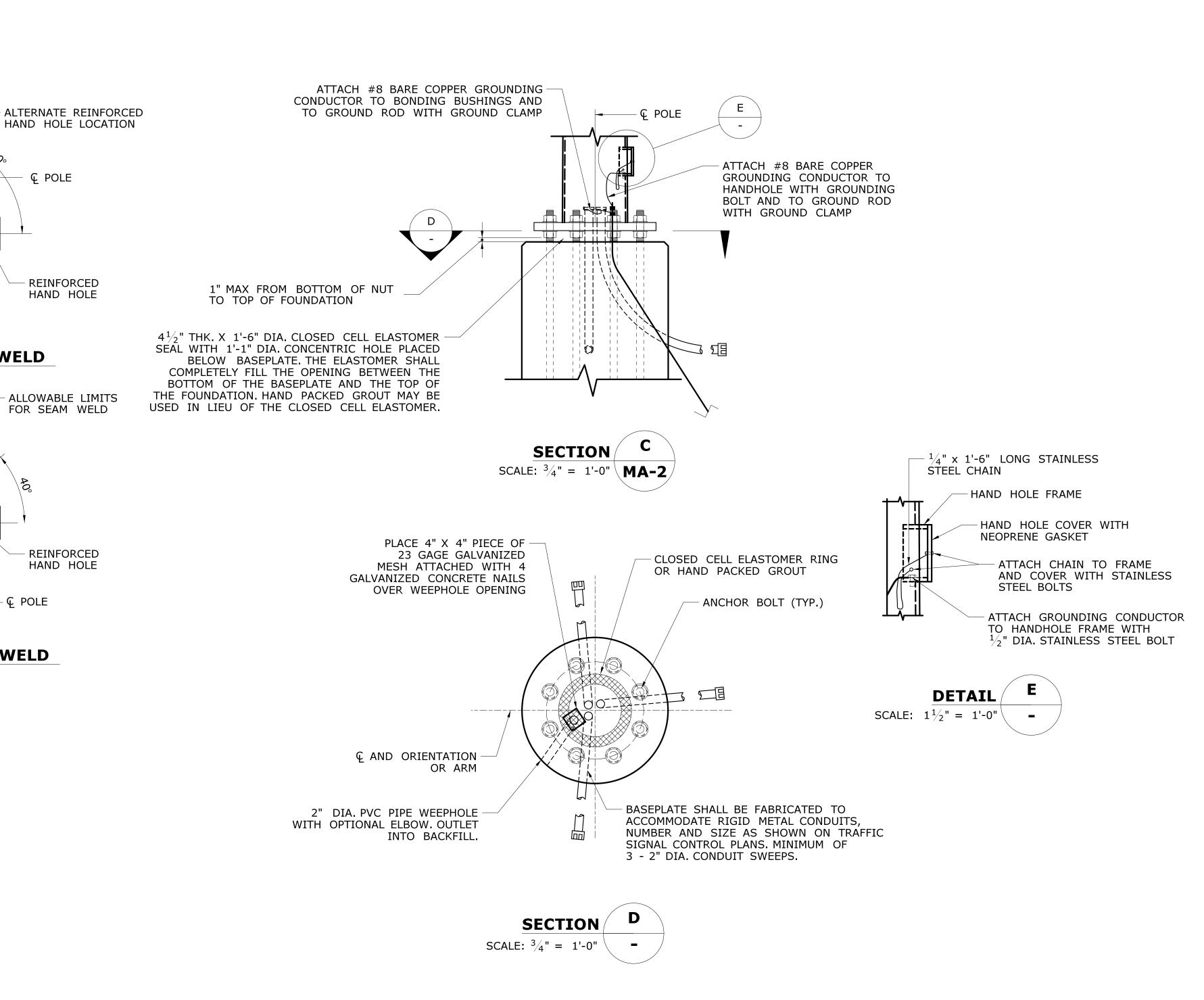
REINFORCED

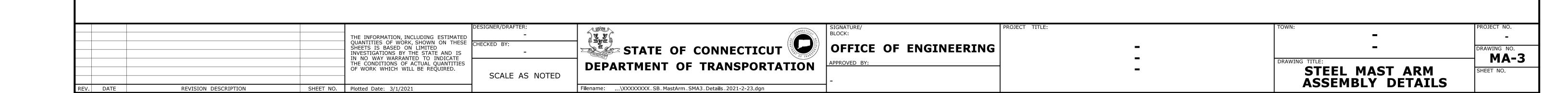
HAND HOLE

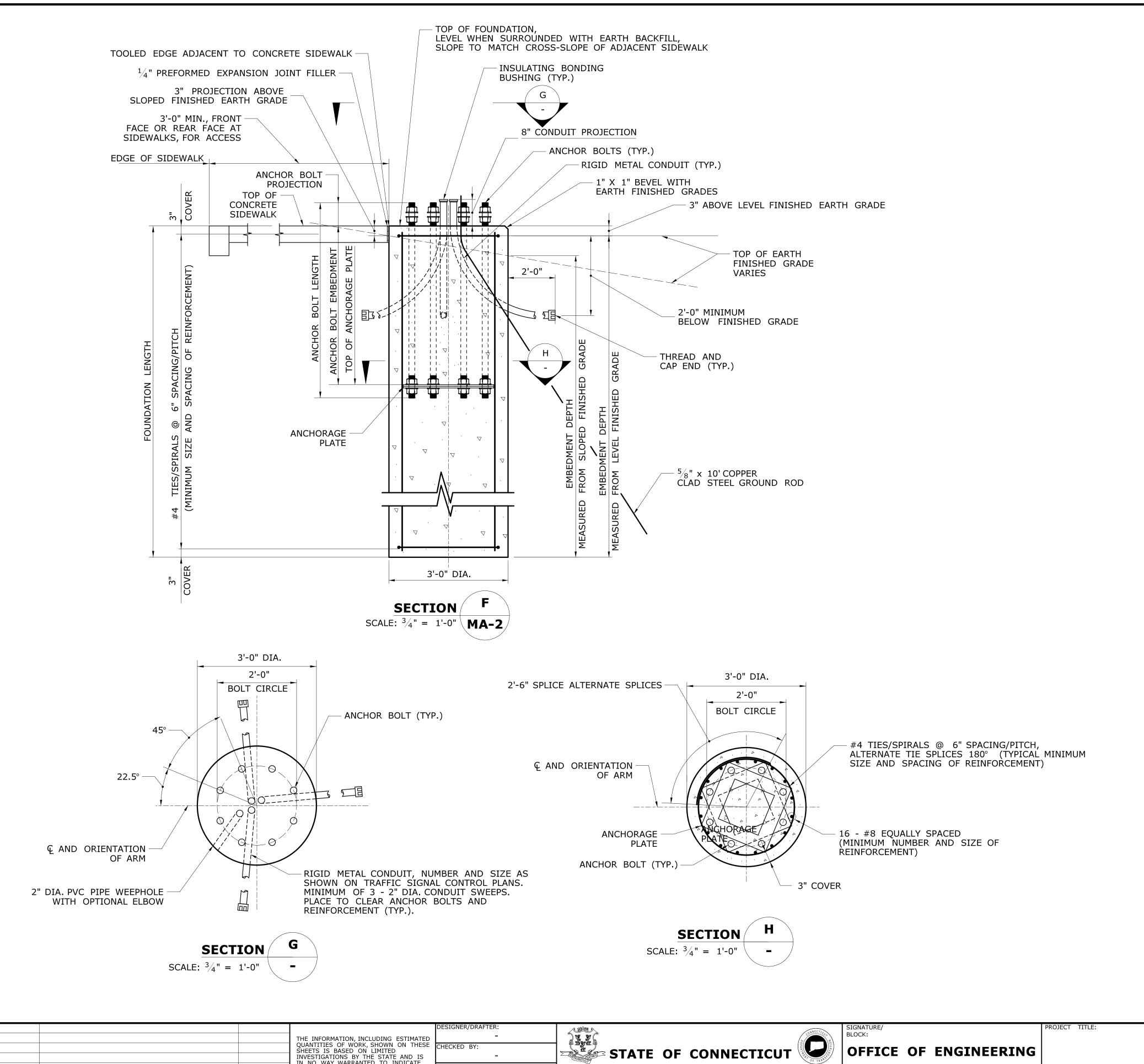
€ POLE

ATTACH TAG TO POLE AND ARM -WITH SELF-TAPPING TAMPER RESISTANT STAINLESS STEEL SCREWS (TYP.) • IDENTIFICATION NUMBER: MANUFACTURER: DATE OF MANUFACTURE: MM/YY ARM LENGTH: IN FEET (METERS)

IDENTIFICATION TAG - N.T.S.







DEPARTMENT OF TRANSPORTATION

Filename: ...\XXXXXXXX_SB_MastArm_SMA4_FndDetails_2021-2-23.dgn

INVESTIGATIONS BY THE STATE AND IS

IN NO WAY WARRANTED TO INDICATE THE CONDITIONS OF ACTUAL QUANTITIES OF WORK WHICH WILL BE REQUIRED.

SHEET NO. Plotted Date: 3/1/2021

REVISION DESCRIPTION

REV. DATE

SCALE AS NOTED

FOUNDATION NOTES

THE DRILLED SHAFT FOUNDATION FOR THE MAST ARM ASSEMBLY SHALL BE DESIGNED, FABRICATED, AND CONSTRUCTED BY THE CONTRACTOR IN ACCORDANCE WITH THE SPECIAL PROVISION "TRAFFIC CONTROL FOUNDATION - MAST ARM".

THE FOUNDATION SHALL BE DESIGNED FOR THE SOILS AND ROCK PROPERTIES BASED ON THE SUBSURFACE CONDITIONS (CHARACTER OF THE SOIL AND ROCK, PRESENCE OF GROUND WATER, ETC.) IN THE LOCATION OF, ADJACENT TO AND BELOW THE DRILLED SHAFT FOUNDATION EXCAVATION. THE NEED AND EXTENT OF ALL SUBSURFACE EXPLORATIONS AND INVESTIGATIONS SHALL BE DETERMINED BY THE CONTRACTOR.

THE DESIGN OF THE FOUNDATION SHALL BE COORDINATED WITH THE MAST ARM ASSEMBLY AND THE MAST ARM ANCHORAGE TO ENSURE THAT THE FOUNDATION IS ADEQUATE FOR THE MAST ARM REACTIONS AND TO AVOID CONFLICTS BETWEEN THE EMBEDDED MAST ARM ANCHORAGE AND THE FOUNDATION REINFORCEMENT.

THE CONCRETE FOR THE FOUNDATION SHALL CONFORM TO CLASS PCC04460. THE COMPRESSIVE STRENGTH, f', USED IN DESIGN OF THE FOUNDATION SHALL BE 4,000 PSI. THE COMPRESSIVE STRENGTH OF THE CONCRETE IN THE CONSTRUCTED FOUNDATION SHALL CONFORM TO THE REQUIREMENTS OF 6.01 - CONCRETE FOR STRUCTURES AND M.03 - PORTLAND CEMENT CONCRETE.

THE REINFORCEMENT SHALL BE UNCOATED AND CONFORM TO ASTM A615, GRADE 60. THE REINFORCEMENT SHALL BE ASSEMBLED WITH WIRE TIES. WELDING TO ASSEMBLE REINFORCEMENT IS NOT PERMITTED, ALL REINFORCEMENT SHALL HAVE 3" COVER, UNLESS OTHERWISE NOTED.

THE CONCRETE SHALL BE PLACED IN THE EXCAVATION AGAINST UNDISTURBED EARTH.

THE MAST ARM SHALL NOT BE ERECTED ON THE FOUNDATION UNTIL THE CONCRETE IN THE SHAFT HAS ATTAINED A COMPRESSIVE STRENGTH, fc, GREATER THAN OR EQUAL TO 4000 PSI.

THE COST OF THE FOUNDATION, INCLUDING THE EXCAVATION, CONCRETE AND REINFORCEMENT, INCLUDING THE DESIGN AND FABRICATION, TO BE INCLUDED FOR PAYMENT UNDER THE ITEM "TRAFFIC CONTROL FOUNDATION - MAST ARM".

WHERE AN EXISTING CONCRETE SLAB ABUTTING A FOUNDATION IS DAMAGED OR CUT DURING INSTALLATION, REPLACE THE ENTIRE SECTION.

> RAWING NO. MA-4 STEEL MAST ARM ASSEMBLY SHEET NO. FOUNDATION DETAILS